PRC®

protective coatings
caulking compounds
sealants • adhesives

TECHNICAL DATA SHEET

PR-340

THIS SHEET COVERS PR 340-B½ AS WELL AS PR-340

USE

An aluminum colored, putty-type compound for use on the exterior of aircraft to provide aerodynamic smoothness, to seal against weather, and to prevent faying surface corrosion from chemical cleaners and fuel spillage.

DESCRIPTION

PR-340 is a two-part, liquid polysulfide polymer compounded into a thixotropic paste, aluminum in color, which may be applied easily by spatula or extrusion gun. Upon application of an accelerator, the mixed compound cures at room temperature to form a firm, tough rubber having unusual adhesive and weathering properties and excellent resistance to fuel spillage, abrasion, and salt water.

APPLICATION PROPERTIES (Typical)

Color Base Compound	Aluminum
Accelerator	Red-Brown
Mixing Ratio	10:1 by weight (base compound: accelerator)
Nonvolatile Content, Minimum	97%
Viscosity, Brookfield Spindle #7 @ 1 rpm	13,000 poises
Vertical Flow, 1½" × ⅜" mass	0.1"
Application Life	2 hrs. @ 75°F, 50% RH
Tack Free Time	24 hrs. @ 75°F, 50% RH
Cure Time (To 40 Shore A hardness)	72 hrs. @ 75°F, 50% RH

PERFORMANCE PROPERTIES (Typical)

Color	Aluminum
Specific Gravity	1.5
Hardness, Shore A	50
Shrinkage	2%
Adhesion, Peel (Cohesive)	10 lbs./in. of width
Shear (Cohesive)	80 psi
Tensile Strength	200 psi
Ultimate Elongation	100%
Temperature Range	—65°F to +225°F
Low Temperature Flexibility	—65°F
Abrasion Resistance	5 grams/1000 cycles (Taber H-22; 1000 gram load)

Fluid Resistance: (Cure — 7 days @ 75°F, 50% RH) No adhesion loss or blistering after the following immersions:

Immersion Fluid	Immersion Conditions
Distilled Water	7 days @ 70°F
MIL-H-5606 hydraulic fluid	7 days @ 200°F
TT-S-735, Type III fluid	24 hrs. @ 70°F
MIL-L-7808 engine oil	24 hrs. @ 70°F

Corrosion Resistance: No evidence of corrosion under the sealant on aluminum alloy (Specification QQ-A-250/12) or cadmium plate after 14 days at 175°F and 95% relative humidity.

Weather Resistance	In excellent condition after 3 years exposure
Effect on acrylic plastics	Will not cause crazing
Fungus Resistance	Non-nutrient

NOTE: The above application and performance property values are typical for the material, but are not intended for use in specifications or for acceptance inspection criteria because of variations in testing methods, conditions, and configurations.

PURCHASING DATA

PRODUCT DESIGNATION

When ordering this product, designate PR-340.

STANDARD PACKAGING

Designation	Base Compound Container	No. Per Case
½ pt. kit — 3½ fl. oz.	½ pt. can	16
½ pt. kit — 5 fl. oz.	½ pt. can	16
Pint kit — 8 fl. oz.	1 pt. can	16
Pint kit — 9 fl. oz.	1 pt. can	16
Pint kit — 12 fl. oz.	1 pt. can	16
Quart kit — 16 fl. oz.	1 qt. can	9
Quart kit — 24 fl. oz.	1 qt. can	9
Gallon kit — 96 fl. oz.	1 gal. can	4
One pint	1 pt. can	16
One quart	1 qt. can	9
One gallon	1 gal. can	4
Five gallons	5 gal. lug cover pail	....
50 gallons	55 gal. open-top drum	....

The fluid ounce content is the amount of base compound (128 fluid ounces per gallon). Kits and full containers are furnished with a premeasured quantity of base compound and accelerator individually packaged and assembled as a single unit. Bulk quantities of 5 and 50 gallons are accompanied by sufficient accelerator individually packaged. Kits are designed so that adequate space is available in the base compound containers for addition of accelerator and mixing.

SHIPPING CLASSIFICATION: Caulking or Glaziers' Compound NOI

SURFACE PREPARATION

To obtain good adhesion, the surface should be cleaned with an oil-free solvent which will dissolve oil and wax (reclaimed solvents should not be used). A progressive cleaning procedure should be used. Wash one small area at a time, then dry with a clean cloth before the solvent evaporates to prevent redeposition of the oil or wax on the surface.

Always pour the solvent on the washing cloth to maintain a clean solvent supply.

MIXING INSTRUCTIONS

PR-340 should be mixed as follows:

1. Thoroughly stir accelerator in its container until an even consistency is obtained.
2. When packaged in bulk, mix 1 part (by weight) of accelerator with 10 parts (by weight) of base compound. When packaged in kits, accelerator and base compound are furnished in the proper proportions. The entire contents of the accelerator container should be added to the base compound.

SUPERSEDES MAY 1965

PRODUCTS RESEARCH & CHEMICAL CORPORATION

CORPORATE OFFICES AND WESTERN MANUFACTURING DIVISION
2919 EMPIRE AVENUE
BURBANK, CALIFORNIA 91504

EASTERN SALES AND MANUFACTURING DIVISION
410-416 JERSEY AVENUE
GLOUCESTER CITY, NEW JERSEY 08030

DATE ISSUED NOVEMBER 1968

3. Slowly stir the accelerator into the compound and thoroughly mix until a uniform color is obtained. Be sure to scrape the sides and bottom of the container in order to include all the compound in the mixture and assure uniform blending. Scrape mixing paddle periodically to remove unmixed compound. Slow mixing by hand is recommended. PR-340 may be mixed by a slow speed mechanical mixer. When using a mechanical mixer limit speed to 80 rpm to prevent generation of internal heat which will reduce application life.

NOTE: Proper mixing and correct proportions are extremely important if optimum results are to be obtained. Mixing the compound by experienced personnel at some central location is recommended.

APPLICATION INSTRUCTIONS

Application life is the period of time that the mixed compound remains at the consistency suitable for application by spatula or extrusion gun. Application life is always based on standard conditions of 75°F and 50% relative humidity. For every 10°F rise in temperature, the application life is reduced by half and for every 10°F drop, it is doubled. High humidity at the time of mixing also shortens the application life.

Apply PR-340 with a spatula or extrusion gun. Nozzles with a 1/8" to 1/4" diameter orifice are generally used on extrusion guns when applying this product. However, nozzles with other diameters and configurations are available for special requirements. Hold extrusion gun nearly perpendicular so that extruded sealant will be forced into the cavity or seam. Every effort should be made to avoid air bubbles and voids in the sealant.

Freshly applied fillets of PR-340 may be shaped or smoothed by use of a small paddle-shape tool. Cured PR-340 may be shaped or smoothed by wet-sanding with a suitable abrasive or with a sharp cutting tool.

CURE

PR-340 will cure to a 40 Shore A hardness in approximately 72 hours at 75°F and 50% relative humidity. The length of cure depends on the ambient temperature and relative humidity. The temperature/time relationship is approximately the same for curing as for application life. Low humidities will extend the cure time. Cure may be hastened by applying heat up to 120°F.

CLEANING OF EQUIPMENT

Wash equipment and tools with a chlorinated solvent immediately after use or before material cures. Suitable compounds for removing cured material are available from the following companies:

CEE BEE CHEMICAL CO., INC.	Los Angeles
KELITE CORPORATION, INC.	Los Angeles
TURCO PRODUCTS, INC.	Los Angeles
PENNSALT CHEMICALS CORP., DELCHEM DIV.	Los Angeles
WYANDOTTE, CHEMICALS CORP.	Wyandotte, Michigan

STORAGE LIFE

The storage life of PR-340 is at least one year when stored at temperatures below 80°F in the original unopened containers. Slight changes in the application properties may occur during storage, but these changes should not effect the performance properties of the cured materials.

HEALTH PRECAUTIONS

PR-340 and related products have been proven to be safe materials to handle when reasonable care is observed. The accelerator contains a lead compound. Avoid repeated or prolonged contact with the skin, especially contact with open breaks in the skin, and ingestion. Always wash hands before eating or smoking. If accelerator contacts the skin, flush area with warm water. Obtain medical attention in cases of extreme exposure or ingestion.